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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,790	08/17/2003	Chien-Kuo Kuan	PMXP0157USA	1789
27765 7590 09/18/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER LEE, CHEUKFAN	
			ART UNIT 2625	PAPER NUMBER
			NOTIFICATION DATE 09/18/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com  
Patent.admin.uspto.Rcv@naipo.com  
mis.ap.uspto@naipo.com.tw

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/604,790		KUAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Cheukfan Lee		2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-12 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-17 are pending. Claims 1, 7 and 13 are independent.

2. Claims 1-6 and 13-17 are objected to because of the following:

In claim 1, line 2, "sourcefor" should read -- source for --.

Claims 2-6 are objected to as being dependent on objected claim 1.

In claim 13, line 10, "controller,the" should read -- controller, the --.

Claim 14-17 are objected to as being dependent on objected claim 13.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakashima et al. (U.S. Patent No. 4,926,253).

Regarding claim 1, Nakashima et al. discloses a scanning device (document reading apparatus in Fig. 1) comprising a first light source (fluorescent lamp 1) for generating light, a second light source (LED array 2) for generating light, a photosensor (image sensor 6) for detecting light generated by the first light source (fluorescent lamp 1) and the second light source (LED array 2) and then by way of a document (20) (Figs. 2 and 3, col. 5, line 18 – col. 6, line 45, note that the fluorescent lamp 1 is on from step

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201 until step 217), a controller (an inherent controller, including control circuit 7 in Fig. 1) for controlling the operation of the scanning device, wherein a warm-up time period of the first light source is longer than a warm-up time period of the second light source (LED array 2) (Fig. 7, col. 9, line 52 – col. 10, line 2). As shown in Fig. 7, at a state of low temperature, the luminance level of the second light source (LED array 2) is at 100%, while the luminance level of the first light source (fluorescent lamp 1) is only at about 65%. This means that the first light source (fluorescent lamp 1) requires/has a longer warm-up time period than that of the second light source (LED array 2).

Regarding claim 2, the first light source is fluorescent lamp (1), which is a cold cathode fluorescent lamp (CCFL).

Regarding claim 5, see facsimile machine or facsimile equipment (Abstract, Summary of the Invention at col. 1, lines 65-66), and document fed scanner (col. 6, lines 37-39).

Regarding claim 6, according to Fig. 1 and col. 6, lines 37-39, the first light source (fluorescent lamp 1) and the second light source (LED array 2) are installed within a scanning module of the scanning device (Fig. 1).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (U.S. Patent No. 4,926,253) in view of Bliley et al. (U.S. Patent No. 7,102,801).

Regarding claim 3, the second light source (2) of Nakashima et al. is an LED array. Nakashima et al. does not disclose that the LED array (2) is a white-light LED array. Nakashima et al. does not disclose detail of the LED array (2), detail on how the red data signal is generated when the LED array (2) is in its ON state (col. 5, line 62 – col. 6, line 2) and detail on how the illumination in red by the LED array (2) is produced (col. 7, lines 15-17). However, employing a single white-light LED array and an appropriate color filter(s) to generate light of a color corresponding to the filter(s), such as red, green or blue, is one of several alternatives of generating color light for illuminating a document is taught by Bliley et al. (Fig. 1, col. 3, lines 4-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the concept of Bliley et al. to employ a white-light LED array and an associated color filter to generate the desire color light, as opposed to LED arrays of different colors, such as red, green or blue arrays to provide a compact LED light source.

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7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (U.S. Patent No. 4,926,253) in view of Bliley et al. (U.S. Patent No. 7,102,801).

Regarding claim 4, Nakashima et al. does not disclose that the photosensor (image sensor 6) is a charge-coupled device (CCD).

Hu et al. discloses a CCD (a one-dimensional CCD array 304) for detecting light generated by a first light source (fluorescent lamp 314) and a second light source (LED array 310, 312) and then by way of a document (Fig. 3A, col. 5, lines 38-41, col. 6, lines 11-35).

Because the image sensor (6) of Nakashima et al. and the CCD sensor (304) of Hu et al. both are linear image sensors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a CCD as the image sensor (6) of Nakashima et al. as taught by Hu et al., for the advantage of the CCD technology, which includes its suitability for image processing, multiplexing and storage operation.

8. Claims 13-17 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

9. Claims 7-12 are allowed.

10. The following is an examiner's statement of reasons for allowance:

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Independent claim 7 is allowable because the prior art of record, including Nakashima et al. (U.S. Patent No. 4,926,253) applied above, does not disclose a method of scanning a document with a scanning devices having a first light source, a second light source and a photosensor as defined in claim 7, the method comprising, in combination with other limitations of claim 7, scanning the document using the second light source while the first light source is being heated, and scanning the document using both the first light source and the second light source to shorten the exposure time of the photosensor when the first light source is heated, wherein a warm-up time period of the first light source is longer than a warm-up time period of the second light source.

Claims 8-12 depend on claim 7.

Independent claim 13 would be allowable because the prior art of record, including Nakashima et al. (U.S. Patent No. 4,926,253) applied above, does not disclose a multi-function product comprising, in combination with other limitations of claim 13, a scanning device, which comprises a first light source, a second light source and a photosensor, an operations pad connected to the controller, the operations pad having a control button, wherein when the control button is triggered, the controller causes only the second light source to be enabled to scan the document, wherein a warm-up time period of the first light source is longer than a warm-up time period of the second light source.

Claims 14-17 depend on claim 13.



**Note: The closest reference Chang et al. (U.S. Patent No. 7,079,791), cited below, discloses an apparatus similar to that presently claimed. However, Chang et al. filed April 1, 2004 in the U.S. is not prior art to the present application filed August 17, 2003 and having a foreign priority date May 21, 2003.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang et al. (U.S. Patent No. 7,079,791), "Apparatus for reducing warm-up time by auxiliary light source and method for the same", filed in the U.S. April 1, 2004

Tsuboi (U.S. Application Publication No. US 2005/0041269 A1), "Image forming apparatus and image scanning method", Fig. 3, both LED array and cold-cathode tube, Fig. 5

Tregoning et al. (U.S. Application Publication No. 2007/0097386 A1), "Imaging system and method", CCFL1 30, CCFL2 32 and LED set 34

Noji et al. (U.S. Application Publication No. 2002/0008850 A1), paragraphs 0043, 0046, 0049, fluorescent lamp and halide

Ichinose Shuichi (JP 02-107055), "Picture input device"



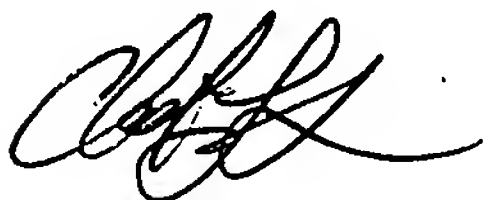
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Ichinose Shuichi (JP 03-182157), "Picture input device"

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee  
September 9, 2007